Please type a plus sign (+) inside this box --- +

Sen

RE	IAPR	$\sqrt{e}$
5	2709	3
111	0,0	
PATE	VIATE	(to

# TRANSMITTAL FORM

o be used for all correspondence after initial filing)

	T
Application Number	09/919,020
Filing Date	July 31, 2001
Inventor(s)	James T. LAGROTTA et al.
Group Art Unit	2642
Examiner Name	Karen L. Le
Attorney Docket Number	129250-002151/US

ENCLOSURES (check all that apply)						
Fee Transmittal F	orm	Assignmen			er Allowance Communication to oup	
Fee Attached			e Official Draftsperson and ets of Formal Drawing(s)	BF	TTER SUBMITTING APPEAL RIEF AND APPEAL BRIEF (w/clean rsion of pending claims)	
Amendment		Licensing-r	elated Papers		peal Communication to Group htice of Appeal, <b>Brief</b> , <u>Reply Brief</u> )	
After Final		Petition		Pro	prietary Information	
Affidavits/dec	laration(s)		Convert to a Application	☐ Sta	atus Letter	
Extension of Time	e Request		ttorney, Revocation Correspondence Address		her Enclosure(s) ease identify below):	
Express Abandon	ment Request	☐ Terminal D				
Information Disclo	osure Statement	CD, Numbe	er of CD(s)			
Certified Copy of Document(s)	Priority	Remarks				
Response to Miss Incomplete Applic						
Response to Miss Parts under 37 Cl 1.52 or 1.53						
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT						
Firm or Individual name	CAPITOL PATEN TRADEMARK LAN	T & METERM, PLLC	Attorney Name John E. Curtin		Reg. No. 37,602	
Signature	1/1					
Date	July 5th, 2006					
	<del> </del>		<del></del>			

## IN THE U.S. PATENT AND TRADEMARK OFFICE

**S**pellants:

James T. LaGrotta et al.

Application No.:

09/919,020

Art Unit:

2642

Filed:

July 31, 2001

Examiner:

Karen L. Le

For:

USE OF OVER-THE-AIR OPTICAL LINK

WITHIN A GEOGRAPHICALLY DISTRIBUTED

BASE STATION

Attorney Docket No.:

129250-002151/US

# APPELLANTS' REPLY BRIEF IN RESPONSE TO THE EXAMINER'S ANSWER

### MAIL STOP APPEAL BRIEF - PATENTS

Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22314 July 5th, 2006

#### I. **ARGUMENTS:**

## THE SECTION 103 REJECTIONS

# (i) Appellants' Specification Does Not Disclose Non-co-located Equipment That Communicates Using A Wireless Optical Link

In response to the Appellants' statements in their opening brief that Willebrand does not disclose non-co-located first wireless RF communication equipment and processing/control equipment the Examiner takes the position, in sum, that statements made by the Appellants in the specification amount to a disclosure of this feature of the claims.

Appellants respectfully disagree.

The Appellants note that it is not just any RF equipment and processing control equipment that is non-co-located. Rather, such equipment must be connected by "wireless optical communication equipment". In taking her position, the Examiner appears to ignore the fact that the non-co-located antenna 110 and control equipment 120 in Fig.1 are connected by a cable 130.

Backing up somewhat, include both the feature of "wireless optical communication equipment" that communicates "signals between the first wireless RF communication equipment and processing and control equipment" and that the RF and processing/control equipment be non-colocated. Said another way, first, the RF and processing/control equipment in claim 1 must communicate over a wireless optical link, and, second, while doing so these two pieces of equipment are not co-located.

The Examiner appears to read the claim in reverse (or impermissibly parse the claim) when applying the art of record. By doing so the Examiner, in effect, ignores the fact that the equipment which is communicating using a wireless optical link must be non-co-located.

Atty. Docket: 129250-002151/US

In sum, Appellants' position is that the alleged prior art discussed in the specification does not disclose wireless optical communication equipment first wireless being adapted to communicate signals between communication equipment and processing and control equipment, where the first wireless RF communication equipment and the processing/control equipment are non-co-located.

## (ii) No Proper Motivation To Combine

Even if the Appellants' statements in their specification and Willebrand separately disclose some of the features of the claimed inventions, the Appellants' note that the Examiner has not set forth a proper motivation to combine these two references.

In the Examiner's Answer she states that "It is always desirable to use wireless instead of cable in expensive land area to reduce cost without reducing the signal of the system". This "motivation" however is not found or suggested in Willebrand. Instead, it is only found in the instant specification's description of the disadvantages of equipment that is connected as shown in Fig.1 (i.e., by a cable). In sum, the instant specification has been used by the Examiner as a roadmap in rejecting the claims based on obviousness; this is impermissible. Accordingly, Appellants respectfully submits that the subject matter of claims 1-7, 10-13, 16-17, 20-25 and 28-30 would not have been obvious to one of ordinary skill in the art upon reading the disclosures of the alleged admitted prior art and Willebrand.

With respect to the separate rejections of claims 17-19, 22-25 and 28-30, the Appellants respectfully reiterate the positions set forth in their opening brief.

APPELLANT'S REPLY BRIEF

U.S. Application No.: 09/919,020 Atty. Docket: 129250-002151/US

## II. CONCLUSION:

Appellants respectfully request that the members of the Board reverse the Examiner's rejection of claims 1-7, 10-13, 16-17, 20-25 and 28-30 and allow these claims.

The Commissioner is authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 50-3777 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,
CAPITOL PATENT & TRADEMARK LAW FIRM, PLLC.

By:		
<b>₽</b> γ.		

John E. Curtin, Reg. No. 37.602

P.O. Box 1995 Vienna, Virginia 22183 (703) 266-3330 APPELLANT'S REPLY BRIEF

U.S. Application No.: 09/919,020

Atty. Docket: 129250-002151/US

APPENDIX A

**CLAIMS APPENDIX** 

1. (Previously Presented) An RF base station apparatus, comprising:

first wireless RF communication equipment; and

wireless optical communication equipment coupled to the first wireless

RF communication equipment,

the wireless optical communication equipment being adapted to

communicate signals between the first wireless RF communication equipment

and processing and control equipment, and

the first wireless RF communication equipment and the processing and

control equipment being non-co-located.

The apparatus of claim 1, wherein the first wireless 2. (Original)

RF communication equipment is at a significant distance from the other

equipment of the RF base station.

The apparatus of claim 2, wherein the significant 3. (Original)

distance is at least ten meters.

The apparatus of claim 1, wherein: 4. (Original)

the first wireless RF communication equipment is adapted to receive

signals that conform to a predefined wireless communication standard; and

- 4 -

U.S. Application No.: 09/919,020

Atty. Docket: 129250-002151/US

the signals that the wireless optical communication equipment is adapted to communicate represent information that conforms to the predefined wireless communication standard.

- The apparatus of claim 1, wherein the first wireless 5. (Original) RF communication equipment comprises an RF antenna.
- The apparatus of claim 5, wherein the first wireless 6. (Original) RF communication equipment further comprises an RF-module.
- The apparatus of claim 1, wherein the wireless optical 7. (Original) communication equipment comprises a telescope.
  - 8. (Cancelled)
  - (Cancelled) 9.
  - (Previously Presented) An RF base station, comprising: 10. an RF antenna;

first wireless optical communication equipment coupled to an RF communication equipment;

a processing and control section, the processing and control section being at a significant distance from the RF antenna;

second wireless optical communication equipment coupled to the processing and control section; and

the first wireless optical communication equipment being adapted to communicate with the second wireless optical communication equipment.

Atty. Docket: 129250-002151/US

11. (Original) The apparatus of claim 10, wherein:

the RF antenna is adapted to receive signals that conform to a predefined wireless communication standard; and

the signals that the wireless optical communication equipment is adapted to communicate represent information that conforms to the predefined wireless communication standard.

12. The RF base station of claim 10, further comprising: (Original) at least one other RF antenna; and

at least a third wireless optical communication equipment, each being adapted to communicate with the second wireless optical communication equipment; one wireless optical communication equipment being coupled to each RF antenna.

- The RF base station of claim 10, wherein the 13. (Original) significant distance is at least ten meters.
  - 14. (Cancelled)
  - 15. (Cancelled)
  - 16. (Original) The RF base station of claim 10, wherein:

the first wireless optical communication equipment comprises a first telescope; and

the second wireless optical communication equipment comprises a second telescope.

17. (Previously Presented) A method, comprising the steps of:

receiving an RF signal at an RF antenna of an RF base station;

modulating a signal representing the RF signal onto an optical signal;

and

transmitting the optical signal by wireless optical communication

equipment to a processing and control section of the RF base station, the

processing and control section being at a significant distance from the RF

antenna.

18. (Previously Presented) The method of claim 17, further

comprising the steps of:

receiving the optical signal on second wireless optical communication

equipment of the RF base station,

the second wireless optical communication equipment coupled to the

processing and control section of the RF base station; and

obtaining the signal representing the RF signal from the optical signal.

(Previously Presented) The method of claim 17, wherein: 19.

signals received by the RF antenna conform to a predefined wireless

communication standard; and

the signals transmitted by the wireless optical communication

equipment represent information that conforms to the predefined wireless

communication standard.

20. (Cancelled)

- 7 -

Atty. Docket: 129250-002151/US

21. (Cancelled)

22. (Original) The method of claim 17, further comprising the step

of processing the RF signal to produce a signal that can be modulated onto an

optical signal, wherein this step is performed prior to the modulating step.

23. (Original) The method of claim 17, wherein the wireless optical

communication equipment comprises a telescope.

24. (Previously Presented) A method, comprising the steps of:

obtaining a signal at a processing and control section of equipment of

an RF base station, the processing and control section of equipment being at

a significant distance from an RF antenna;

modulating a signal representing the signal onto an optical signal; and

transmitting the optical signal over wireless optical communication

equipment to the RF antenna of the RF base station.

The method of claim 24, further comprising the steps 25. (Original)

of:

receiving the optical signal on second wireless optical communication

equipment of the RF base station, the second wireless optical communication

equipment coupled to the RF antenna; and

obtaining the signal from the optical signal;

obtaining an RF signal from the signal;

transmitting the RF signal on the RF antenna.

26. (Cancelled) APPELLANT'S REPLY BRIEF

U.S. Application No.: 09/919,020

Atty. Docket: 129250-002151/US

27. (Cancelled)

28. (Original) The method of claim 24, wherein the wireless optical

communication equipment comprises a telescope.

29. (Previously Presented) An RF base station, comprising:

an RF antenna; and

a telescope coupled to the RF antenna, the telescope being adapted to

communicate signals between the RF antenna and processing and control

equipment of the RF base station,

the RF antenna being at a significant distance from the processing and

control equipment of the RF base station, and wherein

signals received by the RF antenna conform to a predefined wireless

communication standard, and

the signals communicated by the telescope represent information that

conforms to the predefined wireless communication standard.

30. (Original) The apparatus of claim 29, wherein the significant

distance is at least ten meters.